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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,804	04/14/2004	John G. Richardson	B-384	8685

7590 04/07/2006
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EXAMINER

LA, ANH V

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,804

Applicant(s)

RICHARDSON, JOHN G.

Examiner

Anh V. La

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/05/06.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 7-9, 11, 12, 16, 17, 21, and 22 rejected under 35 U.S.C. 102(b) as being anticipated by Sabbattini.

Regarding claim 1, Sabbattini discloses a pipeline communication system comprising a pipeline 10 having a first surface extending along at least portion of a length of the pipeline, a conductive bus 10, a transmitter 2, and a receiver 3.

Regarding claim 11, Sabbattini discloses a pipeline communication bus comprising a communication bus 10 including a first conductive trace (at 2) and a second conductive trace (at 3), a transmitter interface 2, a receiver 3.

Regarding claim 16, Sabbattini discloses method of communicating along a pipeline comprising forming a plurality of conductive traces (at 2, 3) coupling to a pipeline at a surface extending along at least a portion of the length of the pipeline, transmitting (2) information along the plurality of the conductive traces and receiving (3) information along the plurality of the conductive traces.

Regarding claim 2, Sabbattini discloses a plurality of conductive traces (at 2, 3) conformally fabricated to the surface of the pipeline.

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Regarding claims 7, 21, Sabbattini discloses an external surface.

Regarding claims 8, 22, Sabbattini discloses an interior surface.

Regarding claims 9, 12 and 17, Sabbattini discloses a serial bus protocol (figures 1-3).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sabbattini.

Regarding claim 10, Sabbattini discloses all the claimed subject matter as set forth above in the rejection of claim 9, but does not disclose an RS-485 protocol. However, it would have been obvious to have the protocol to be an RS-485 protocol since it is not inventive to discover the optimum or workable ranges by routine experimentation.

5. Claims 3-6, 13-15, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sabbattini in view of Moore.

Regarding claims 3-6, 13-15, 18-20, Sabbattini discloses all the claimed subject matter as set forth above in the rejection of claim 2, but does not disclose thermally

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sprayed, electrically conductive material (claims 13, 18 and 3), a first insulative layer (claims 4, 14, 19), a bonding layer (claim 5), a second insulative layer (claims 6, 15, 20). Moore teaches the use of thermally sprayed, electrically conductive material (abstract), a first insulative layer, a bonding layer, a second insulative layer (column 10, line 55-col. 11, line 5). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include thermally sprayed, electrically conductive material, a first insulative layer, a bonding layer, a second insulative layer to the system of Sabbattini as taught by Moor for the purpose of isolating the conductive traces from the surface of the pipeline.

Answers to Remarks

6. Applicant's arguments filed on January 05, 2006 have been fully considered.

On pages 7 and 10-13 of the Remarks, applicant has argued that Sabbattini does not disclose "a conductive bus formed to and extending along a portion of the first surface of the pipeline". Applicant's arguments are not persuasive. Applicant's attention is directed to figure 1, where Sabbattini discloses a conductive bus (inner portion of pipeline 10) formed to and extending along a portion of the first surface (outer surface of pipeline 10) of the pipeline 10 or a conductive bus (outer portion of pipeline 10) formed to and extending along a portion of the first surface (inner surface of pipeline 10) of the pipeline 10.

On pages 8 and 10-13 of the Remarks, applicant has argued that Sabbattini does not disclose "a conductive bus including a first conductive trace and a second conductive trace, the first and second conductive traces adapted to conformally couple with a pipeline at a first surface extending along at least a portion of the length of the pipeline". Applicant's arguments are not persuasive. Applicant's attention is directed to figure 1, where Sabbattini discloses a conductive bus (inner portion of pipeline 10) including a first conductive trace and a second conductive trace (it is clearly seen that the conductive inner portion of pipeline 10 has many traces including at 2 and 3), the first and second conductive traces adapted to conformally couple with a pipeline 10 at a first surface (outer surface of pipeline 10) extending along at least a portion of the length of the pipeline 10.

On pages 9 and 10-13 of the Remarks, applicant has argued that Sabbattini does not disclose "forming a plurality of conductive traces conformally coupled to a pipeline at a surface extending along at least a portion of the length of the pipeline". Applicant's arguments are not persuasive. Applicant's attention is directed to figure 1, where Sabbattini discloses forming a plurality of conductive traces (inner portion of pipeline 10, it is clearly seen that the conductive inner portion of pipeline 10 has many traces including at 2 and 3) conformally coupled to a pipeline 10 at a surface (outer surface of pipeline 10) extending along at least a portion of the length of the pipeline 10 or forming a plurality of conductive traces (outer portion of pipeline 10, it is clearly seen that the conductive outer portion of pipeline 10 has many traces including at 2 and 3)

conformally coupled to a pipeline 10 at a surface (inner surface of pipeline 10) extending along at least a portion of the length of the pipeline 10.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh V. La whose telephone number is (571) 272-2970. The examiner can normally be reached on Mon-Fri from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANH V. LA
PRIMARY EXAMINER

Anh V La
Primary Examiner
Art Unit 2612

AI
April 3, 2006